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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,882	06/28/2001	Ji Chul Lim	8733.449.00	3035
30827	7590	06/01/2004	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			LANEAU, RONALD	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/892,882

Applicant(s)

LIM ET AL.

Examiner

Ronald Laneau

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05/21/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,9,17 and 19 is/are rejected.
- 7) ☒ Claim(s) 2-8,10-16,18 and 20-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/21/04 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2674

4. Claims 1, 9, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's Admitted Prior Art (AAPA) in view of Shirahashi et al (US 5,285,301).

As per claims 1 and 19, the AAPA discloses a liquid crystal display (LCD) panel, comprising: a plurality of data lines included in a display area of the LCD panel, a plurality of gate lines crossing the data lines, a plurality of switching devices positioned at intersections between the data lines and the gate lines, a plurality of pixel electrodes each driven by one of the switching devices (see bgrd. of the invention, figs. 4 and 5). Basically the AAPA discloses every element of the claimed invention except a dummy data line included in a non-display area outside the display area and formed in parallel to the data lines. Shirahashi et al is cited to teach a liquid crystal display device having peripheral dummy lines i.e. the dummy data lines are in a non-display area outside the display area and formed in parallel to the data lines and also to allow each pixel to have substantially a same parasitic capacitance as claimed (col. 11, lines 18-27, see figs. 1, 13 and 15, DDL).

It would have been obvious to one of ordinary skill in the art to utilize the peripheral dummy data line taught by Shirahashi et al into the AAPA because it would provide a liquid crystal display device wherein the likelihood of breakage of the outermost signal line is greatly reduced (col. 1, lines 61-65).

As per claim 9, the AAPA discloses a liquid crystal display (LCD) panel, comprising: a plurality of data lines included in a display area of the LCD panel, a plurality of gate lines crossing the data lines, a plurality of switching devices positioned at intersections between the data lines and the gate lines, a plurality of pixel electrodes each driven by one of the switching

Art Unit: 2674

devices (see bgrd. of the invention, figs. 4 and 5). Basically the AAPA discloses every element of the claimed invention except a dummy data line for compensating a capacitor value difference of an adjacent pixel electrode thereto. Shirahashi et al is cited to teach a liquid crystal display device having peripheral dummy lines which can compensate a capacitor value difference of an adjacent pixel electrode since each pixel includes a capacitor  $C_{add}$  and also to allow each pixel to have substantially a same parasitic capacitance as claimed (col. 11, lines 18-27, see figs. 1, 13 and 15, DDL).

It would have been obvious to one of ordinary skill in the art to utilize the dummy data line taught by Shirahashi et al into the AAPA for the same reasons given in claims 1 and 19.

As per claim 17, this is a method claim corresponding to the apparatus claim 9 and is therefore rejected on the same basis set forth in claim 9.

#### ***Allowable Subject Matter***

5. Claims 2-8, 10-16, 18, and 20-25 are objected for the same reasons given in previous action.

#### ***Response to Arguments***

6. Applicant's arguments filed on 05/21/04 have been fully considered but they are not persuasive.

Applicant's arguments about the newly added limitations are not persuasive as they are met by the Shirahashi reference that discloses a liquid crystal display having a dummy data line

Art Unit: 2674

which allows each pixel to have substantially a same parasitic capacitance as seen in fig. 13.

Therefore, the rejection stands.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Laneau whose telephone number is 703-305-3973. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:00 PM or via email: ronald.laneau@uspto.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached at 703-305-4709.

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


Application/Control Number: 09/892,882

Page 6

Art Unit: 2674

Ronald Laneau  
Examiner  
Art Unit 2674

rl  
May 31, 2004

  
RICHARD HJERPE 6/1/04  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600